

What is claimed is:

1. A method for providing quality control in an analytical instrument, said method comprising the steps of:

    sending one or more quality control specimens to a operator of the analytical instrument;

    directly or indirectly communicating control data to the analytical instrument, wherein the control data includes characteristic values for the one or more quality control specimens;

    analyzing the quality control specimen using the analytical instrument and thereby creating instrument analysis data;

    evaluating the instrument analysis data using the control data to determine a functional status of the analytical instrument; and

    providing notice to an operator regarding the functional status of the analytical instrument.

2. The method of claim 1, wherein the evaluation is performed without operator input.

3. The method of claim 2, wherein the evaluation is performed using routines preprogrammed within the analytical instrument.

4. The method of claim 2, wherein the evaluation is performed using a remotely located instrument independent of the analytical instrument.

5. The method of claim 1, wherein the step of evaluating the instrument analysis data includes a comparison of the characteristic values for the one or more quality control specimens and one or more characteristic values created within the instrument analysis data.

6. The method of claim 1, wherein the control data is communicated to the analytical instrument by a machine-readable label attached to the quality control specimen.

7. The method of claim 1, wherein the control data is communicated to the analytical instrument from a remote source via an electronic communications connection.
8. The method of claim 1, further including the step of communicating to the analytical instrument that the quality control specimen is for quality control purposes.
9. The method of claim 8, wherein the step of communicating to the analytical instrument that the quality control specimen is for quality control purposes is performed without operator input.
10. The method of claim 9, wherein the step of communicating to the analytical instrument that the quality control specimen is for quality control purposes is performed by the analytical instrument reading a machine-readable label.
11. The method of claim 1, wherein notice is provided to the operator by preventing the release of a test result until the functional status of the analytical instrument is acceptable.
12. The method of claim 1, wherein notice is provided to the operator by visual indicator.
13. The method of claim 1, wherein notice of an unacceptable functional status is automatically provided to a service provider by electronic communications.
14. The method of claim 1, further including the step of providing a preprogrammed schedule for quality control procedures to analytical instrument.
15. The method of claim 14, further including the step of providing notice to the operator that a quality control procedure is scheduled.

16. The method of claim 14, further including the step of disabling the analytical instrument if the scheduled quality control procedure is not performed within a predetermined period of time.

17. The method of claim 14, further including the step of automatically providing notice to a service provider that a scheduled quality control procedure has not been performed within a predetermined period of time.

18. The method of claim 1, further including the step of providing a standardized identifier that identifies the analytical instrument as utilizing quality control procedures.

19. A method for providing quality control in an analytical instrument, said method comprising the steps of:

- sending one or more quality control specimens to a operator of the analytical instrument;

- directly or indirectly communicating control data to the analytical instrument, wherein the control data includes acceptable operating standards;

- analyzing the quality control specimen using the analytical instrument and thereby creating instrument analysis data;

- evaluating the instrument analysis data using the control data to determine a functional status of the analytical instrument; and

- providing notice to the operator regarding the functional status of the analytical instrument.

20. A quality control system for analytical instruments, said system comprising:

- one or more quality control specimens, each having one or more predetermined characteristic values and an identifier that can identify the quality control specimen;

- an analytical instrument, having an analyzer for analyzing the one or more quality control specimens, and thereby create instrument analysis data that includes one or more sensed characteristic values;

- means for evaluating the sensed characteristic values of the instrument analysis

data using the predetermined characteristic values to determine a functional status of the analytical instrument; and

means for notifying an operator regarding the functional status of the analytical instrument.

21. The quality control system of claim 20, wherein the means for evaluating the sensed characteristic values of the instrument analysis data using the predetermined characteristic values does not require input from an operator.

22. The quality control system of claim 21, wherein the system further comprises a standardized identifier displayed with the system that identifies the system as using quality control procedures.

23. The quality control system of claim 22, wherein the system further comprises means for selectively preventing the reporting of test results in the event the functional status of the analytical instrument is determined to be unacceptable.